

A **postdoc position is immediately available** at the CIB Margarita Salas (CSIC). We are seeking for a highly motivated and collaborative postdoctoral researcher to work on the research project TED2021-131408B-I00 with the aim of studying the molecular basis for virus sensing by immune receptors in plants.

The work will be performed at the Gene expression and stress's lab directed by Dr. César Llave at the Department of Microbe and Plant Biotechnology, Centro de Investigaciones Biológicas Margarita Salas, Consejo Superior de Investigaciones Científicas, Madrid, Spain.

The position is **full-time with funding available for 2 years**. The position is available starting in **January 2023**. Salary will be fixed according to CSIC regulations.

Applicants must have a Ph.D. in plant molecular biology or equivalent. Candidates will be evaluated on their experience and background within the field, communication and writing skills, and ability to work autonomously.

To receive full consideration, interested applicants should send a brief motivation letter, CV, and recommendation letters from two references to Dr. César Llave at cesarllave@cib.csic.es by January 15, 2023. In order to be eligible, **selected candidates will need to enroll in the Job Bank through the CSIC official website**

(<https://sede.csic.gob.es/servicios/formacion-y-empleo/bolsa-de-trabajo>).

Research project

Plants live under the constant menace of pathogen attacks. Among the pathogens posing a threat to food security, viruses are causal agents of devastating crop diseases worldwide. Unfortunately, plant viruses are difficult to control, and phytosanitary products are not available since plant viruses are intracellular parasites. In order to protect themselves from pathogens, plants possess sophisticated immune defense mechanisms to perceive non-self and mount responses to keep them in check. Over the last few years, growing evidence indicates that plant innate immunity contributes to combat viral infections. In our previous projects we learnt that virus infection stimulates the accumulation of SA, which in turn triggers transcriptional activation of the immune repressor BIR1. We found that viruses elicit PTI responses and that BIR1 is a negative regulator of antiviral immunity. The major question, however, is how plant viruses are perceived by PRR immune receptors and how the perception of plant viruses connects to the downstream signaling pathways and activation of specific immune responses. Here, we aim at identifying elicitors specifically modulated upon virus perception and with the potential to stimulate antiviral immune responses. A long-term goal of this project is to develop “easy-to-apply” phytosanitary products based on host- and/or viral-derived peptides that potentiate the natural defenses of the plant as an effective and eco-friendly alternative to chemical products used for the management of viral diseases in crops.